

SIEMENS

POWERMOBIL

SP

Maintenance Protocol

System

POWERMOBIL

Customer:

Address:

Department:

Room:

Contact person:

Telephone:

Cust. specific no.:

Cust. no.:

Date.:

The instructions SPR2-240.831.01.02.02 are required for
this protocol

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English
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SIEMENS Office:	
Address:	
Region:	
Country:	
Contact person:	
Tel.:	
CSE in charge:	
Tel.:	

Remarks Regarding the Protocol:

The protocol is valid as proof of quality for **one** check that must be performed on the system / component in one year.

The check must be performed in the specified intervals.

The results of the check are entered in this protocol.

The chapter numbers in front of the checkpoints indicate the corresponding chapters in the particular instructions (see cover page).

The protocol must be completely filled out by the Customer Service Engineer, i.e.:

- All boxes must be filled out. If a box does not apply to the system or if no entry needs to be made, check the "n.a." box.
- Enter the customer number (Cust. No.:) and the date of the check in the header of each page so that each page can be allocated to a customer and to a check date.
- If there are complaints, the IVKs for the component about which a complaint has been made as well as the type of complaint must be entered in the "Open Points" table provided for this. Correction of these open points also must be documented in this table with the date and a signature. If there are no open points, check "No" and document this with the date and a signature.
- If movable components (also test phantoms that are part of the system) that can be used in different systems are used for the check, they must be entered in the "Movable Components" table provided for this.
- The measurement values for the measurements that must be performed during the check must also be entered in the open spaces / tables provided for them.
- After completing the check, Page 3 of this protocol must be filled out and signed.

Further Processing and Archiving of the Protocol

The protocol is a document and thus must be archived. After completing the test, it must be filed in the corresponding register in the "System Owner Manual" binder. If needed, a copy can be handed to the customer.

System:	
Serial No.:	
Software Version:	
Number of the Service Contract:	
Type of Maintenance:	

Evaluating the Condition of the System / Component

The system has no deficiencies. The image quality test resulted in no differences from required reference values.	
The system / component has slight deficiencies that have no affect on continued operation of the system. However they should be corrected preventively. The image quality test resulted in no differences from required reference values.	
The system / component has serious deficiencies. For safety reasons, continued operation of the system is permitted only after successfully correcting the deficiencies.	

After completing all work steps, an evaluation was performed.

Signature: _____

Date:

Name:

The operator or a person assigned for this has taken note of this evaluation.
(if national regulations require this)

Signature: _____

Date:

Name:

Explanation of Abbreviations in the Protocol

Abbrev.	Explanation	Abbrev.	Explanation
SI	Safety Inspection	PMF	Preventive Maintenance, Operating Value Check, Function Check
SIE	Electrical Safety Inspection	Q	System Quality, Image Quality
SIM	Mechanical Safety Inspection	QIQ	Image Quality
PM	Preventive Maintenance	QSQ	System Quality Check
PMP	Periodic Preventive Maintenance	SW	Software Maintenance
PMA	Preventive Maintenance Adjustments	CSE	Customer Service Engineer

Additional activities performed

Only activities that are not described in the instructions for the system / component need to be listed.

Date:		OK	not OK	n.a.
Additional activities performed:				

Open Points:

Yes: _____ No: _____ Signature: _____

Date: _____ Name: _____

If "Yes", enter the component with the IVK and the open point (only the number) in the table. After completing maintenance, record this in the table.

IVK	Component	Open Points	Completed	
			Date	Signature

Measuring Devices queried electronically:

Yes: _____ No: _____ Signature: _____

Date: _____ Name: _____

If the measurement devices are queried electronically, for example with a Scout Mobile Device, entry of the measuring devices in the table can be skipped.

Measuring Devices	Type	Serial No.	Date Used	Next Calibration Due

Movable Components:

Yes: _____ No: _____ Signature: _____

Date: _____ Name: _____

If "Yes", enter the movable component with which the check was performed along with the with the Serial No. in the table.

Movable components (also test phantoms that are part of the system) are parts that can be used on different systems).

Component	Serial No.

1 General Information**2 Inspection of Exterior and Surroundings****2.1 Visual inspection of exterior**

PMP Damage to the system
 PMP Damage to the mains connection

2.2 Inspection of environment**2.2.1 Power outlets**

SIE Damage
 SIE Mains voltage
 SIE Internal line impedance

3 Safety Inspection**3.1 Mechanical safety**

SIM Cover panels
 SIM Cable deflectors
 SIM Foot brake
 SIM Brakes
 SIM C-arm
 SIM Wheels
 SIM Lifting column
 SIM Emergency Stop switch

3.1.1 I.I. laser light localizer

Option present: Yes: No:

Signature: _____

Date: Name:

SIM Mechanical system
 SIM Function

3.1.2 DICOM bridge

Option present: Yes: No:

Signature: _____

Date: Name:

SIM Mounting

3.1.3 Codonics printer

Option present: Yes: No:

Signature: _____

Date: Name:

SIM Mounting

SIM Guide rails

3.1.4 Monitors/displays

Present: Yes: Material No.:

No: Serial No.:

Signature: _____

Date: Name:

SIM Monitor/displays

3.1.4 Monitors/displays

Present: Yes: Material No.:

No: Serial No.:

Signature: _____

Date: Name:

SIM Monitor/displays

3.1.5 Labels

SIM Warning labels

SIM ID labels

3.2 Electrical safety

SIE Cables and plugs

SIE Check of the POWERPHOS power inverter line

SIE Fluoroscopic timer

SIE Audible warning signal

SIE Radiation indicators

SIE Radiation release switch

SIE Compulsory radiation switch off

SIE Dose rate

SIE Iris collimator

SIE Area-dose product measuring device

Option present: Yes: No:

Signature: _____

Date: Name:

SIE Codonics printer cable breaks

Option present: Yes: No:

Signature: _____

Date: Name:

3.2.1 Monitors/displays**Present:** Yes: Material No.:

No: Serial No.:

Signature: _____

Date: Name:

SIE Monitor/displays

3.2.1 Monitors/displays**Present:** Yes: Material No.:

No: Serial No.:

Signature: _____

Date: Name:

SIE Monitor/displays

3.3 Operation

SIE Check the operating functions

3.4 Conductive rubber

SIE POWERMOBIL stand voltage discharge rubber

SIE Monitor trolley voltage discharge rubber

3.5 Measurements

SIE Protective conductor test (performed under "Final work steps")

SIE Leakage current test (performed under "Final work steps")

4 Maintenance, Operating Value / Functional Inspection**4.1 Maintenance**

PMP Cleaning the system
PMP System ventilation
PMP POWERPHOS fan
PMP Memoskop ventilation

4.1.1 DICOM bridge

Option present: Yes: No:

Signature: _____

Date: Name:

PMP Ventilation

4.1.2 Codonics printer

Option present: Yes: No:

Signature: _____

Date: Name:

PMP Ventilation

PMP Cleaning

4.2 Operating value inspection

PMF Error memory

4.3 Functional inspection

PMF Video printer

Option present: Yes: No:

Signature: _____

Date: Name:

PMF Video recorder

Option present: Yes: No:

Signature: _____

Date: Name:

Cust.-No.:

Date:

Protocol

OK not n.a.
OK

PMF DICOM bridge

Option present: Yes: No:

Signature: _____

Date: Name:

PMF DICOM Connect

Option present: Yes: No:

Signature: _____

Date: Name:

PMF Codonics printer manual control panel

Option present: Yes: No:

Signature: _____

Date: Name:

PMF Laser camera connection

Option present: Yes: No:

Signature: _____

Date: Name:

PMF Image rotation

PMF Slot diaphragm

PMF Monitor display of the iris collimator aperture

PMF Monitor display of the slot diaphragm positions

5 **Final Result / Quality Inspection and General Maintenance**

SIE Image quality (IQ) quick test

SIE DICOM bridge IQ test

SIE Codonics printer IQ test

PMP Maintenance

5.1 **Final work steps**

SIE Protective conductor test

SIE Protective conductor resistance

Test circuit per VDE 0751-1:

Test point 1:	Measurement value 1:
Test point 2:	Measurement value 2:
Test point 3:	Measurement value 3:
Test point 4:	Measurement value 4:
Test point 5:	Measurement value 5:
Test point 6:	Measurement value 6:
Test point 7:	Measurement value 7:
Test point 8:	Measurement value 8:

SIE Leakage current

Messkreis gemäß VDE 0751-1:

Measured value:	mA
Power line voltage:	V
Corrected value:	mA

Cust.-No.:

Date:

Protocol